

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 11061021 A

(43) Date of publication of application: 05 . 03 . 99

(51) Int. Cl **C09D 11/00**
 B41J 2/01
 B41M 5/00
 C09D 11/02
 C09D171/02

(21) Application number: 09236564

(22) Date of filing: 18 . 08 . 97

(71) Applicant: RICOH CO LTD

(72) Inventor: KOYANO MASAYUKI
 KOJIMA AKIO
 NAGAI KIYOFUMI
 IGARASHI MASATO
 KONISHI AKIKO
 MOCHIZUKI HIROTAKA
 TSUYUKI TAKANORI
 YAMADA IKUKO

(54) AQUEOUS INK FOR INK-JET RECORDING AND
RECORDING METHOD USING THIS INK

(57) Abstract:

PROBLEM TO BE SOLVED: To provide an aqueous ink which offers a high discharge reliability, forms a clean image on the recording material and ensures a high image quality in high speed imaging when used in an ink-jet recording with multiple color inks, and a recording method.

SOLUTION: An aqueous ink for ink-jet recording contains a colorant which is soluble to or dispersible in water and which has at least one acidic group in the chemical

structure, water and a wetting agent as essential components, and uses at least two different color inks. Here, the absorption spectrum $f_{mb}(\lambda)$, obtained when equal weight amounts of two arbitrary color inks are mixed, satisfies the following condition:
$$f_{mb}(\lambda) = \{f_1(\lambda) + f_2(\lambda)\} \cdot a/2$$
 (wherein λ is a wavelength of 380-780 nm; $f_{mix}(\lambda)$ is the absorption spectrum obtained when equal weight amounts of two color inks are mixed; $f_1(\lambda)$ is the absorption spectrum of the ink 1 alone; $f_2(\lambda)$ is the absorption spectrum of the ink 2 alone; a is a real number of 0.9-1.1).

COPYRIGHT: (C)1999,JPO